

AMENDMENTS TO THE CLAIMS

This listing of the claims replaces all prior versions and listings:

1. (currently amended): A composition comprising a soluble, substantially integral bARE class protein, a charged amino acid and a zwitterionic detergent, wherein the bARE class protein is an AB5 cholera toxin (CT) ADP-ribosylating toxin or an AB5 *E. coli* heat labile toxin (LT).

2 to 3. (canceled).

4. (currently amended): The composition according to claim 1 3, wherein the charged amino acid stabilising agent is Arginine or Arginine Phosphate.

5. (original): The composition according to claim 4, wherein the Arginine or Arginine phosphate is present in an amount of from about 100mM to about 400mM.

6 to 8. (canceled)

9. (currently amended): The composition according to claim 1 8, wherein the zwitterionic detergent is 3-(3-Cholamidopropyl)-dimethylammonio-1-propanesulfonate (CHAPS).

10. (original): The composition according to claim 9, wherein the zwitterionic detergent is present in an amount of from about 0.05% to about 0.5% by weight per volume (w/v).

11. (canceled).

12. (previously presented): The composition according to claim 1, wherein the ratio of integral bARE protein to dissociated A and B forms is at least 2:1.

13. (canceled)

14. (previously presented): The composition according to claim 1, wherein the bARE protein is an LTK63 or LTK 72 protein.

15. (withdrawn): A method of stabilising a bARE protein, wherein the method comprises providing a bARE class protein according to claim 1 and combining the bARE class protein with a stabilising agent.

16. (canceled)

17. (withdrawn, currently amended): The method according to claim 15 ~~16~~, wherein the charged amino acid stabilising agent is Arginine or Arginine Phosphate.

18. (withdrawn): The method according to claim 17, wherein the Arginine or Arginine phosphate is present in an amount of from about 100mM to about 400mM.

19 to 21. (canceled)

22. (withdrawn, currently amended): The method according to claim 15 ~~21~~, wherein the zwitterionic detergent is 3-(3-Cholamidopropyl)-dimethylammonio-1-propanesulfonate (CHAPS).

23. (withdrawn): The method according to claim 22, wherein the zwitterionic detergent is present in an amount of from about 0.05% to about 0.5% by weight per volume (w/v).

24. (canceled)

25. (withdrawn): The method according to claim 15, wherein the ratio of integral bARE protein to dissociated A and B forms is at least 2:1.

26. (canceled).

27. (withdrawn): The method according to claim 15, wherein the AB5 protein is an LTK63 or LTK 72 protein.

28. (withdrawn): A method of analysing a bARE class protein according to claim 1, the method comprising analysing a composition comprising the bARE class protein under non-dissociating conditions to differentiate between integral and dissociated bARE class proteins.

29. (withdrawn): The method according to claim 28, wherein the method comprises separating the proteins using a charged polymeric separation material.

30. (withdrawn): The method according to claim 29, wherein the polymeric separation material is a hydrogel monomer.

31. (withdrawn): The method according to claim 30, wherein the hydrogel monomer is a hydroxylated polymethacrylate (HEMA) monomer.

32. (withdrawn): The method according to claim 31, wherein the HEMA has a particle size of about 6 microns.

33. (withdrawn): The method according to claim 31, wherein the HEMA has a porosity of about 250A.

34. (withdrawn): A method of analysing a bARE class protein wherein the method comprises:

- (i) applying a bARE class protein to a charged polymeric separation material in an apparatus configured to resolve an integral bARE class protein according to claim 1 from a dissociated bARE class protein;
- (ii) treating the separation material comprising the applied bARE class protein with an ionic buffer; and
- (iii) detecting one or more integral or dissociated bARE class proteins.

35. (withdrawn): The method according to claim 34, wherein the separation material is a hydrogel monomer.

36. (withdrawn): The method according to claim 34, wherein the ionic buffer is a physiologically acceptable buffer with a pH of from about 7.0 to about 8.0.

37. (withdrawn): A method for identifying a bARE class protein stabilisation agent wherein the method comprises:

- (i) combining a bARE class protein according to claim 1 with a candidate stabilising agent to form a bARE protein sample;
- (ii) applying the bARE protein sample to a charged polymeric separation material in an apparatus configured to resolve an integral bARE class protein from a dissociated bARE class protein;
- (iii) treating the separation material comprising the applied bARE class protein with an ionic buffer;
- (iv) detecting one or more integral or dissociated bARE class proteins; and
- (v) determining whether the candidate stabilising agent is a bARE protein stabilising agent.

38. (withdrawn): The method according to claim 37, wherein the method comprises calculating an Integrity Ratio for the bARE protein sample.

39. (withdrawn): The method according to claim 38, wherein the method further comprises comparing the Integrity Ratio for the bARE protein sample with an Integrity Ratio for a control without a candidate stabilising agent.

40. (withdrawn): A stabilising agent identified by the method of claim 37.

41. (withdrawn): The stabilising agent according to claim 40, which is a functional stabilising agent.

42. (withdrawn): The stabilising agent according to claim 40, which is a physical stabilising agent.

43. (previously presented): An immunogenic composition comprising a composition according to claim 1.

44. (original): An immunogenic composition according to claim 43, wherein further comprising an adjuvant, wherein said adjuvant is not the bARE protein.

45. (original): An immunogenic composition according to claim 44, wherein the adjuvant is a mucosal adjuvant.

46. (canceled).

47. (withdrawn): A method of treating a mammal to prevent and/or treat an immune disorder comprising administering a composition according to claim 43.

48. (withdrawn): A method according to claim 47 wherein the mammal is a human.

49 to 60. (canceled).